



Spring 2022 Newsletter



Letter from the President:

Hello,

Yesterday, we finished lambing out our flock for 2022. Like with every lambing, we learned many new lessons along the way and are looking forward to watching our lambs grow. As participants in the **Sheep GEMS project** (more info on page 6 of this newsletter) we collected the new data that the project asks of us, which really only took a minute or so per ewe once we were familiar with the udder score chart. It also helped us to identify poorly conditioned ewes who may need more attention during lactation and some udder issues that may effect lamb survival. Not to mention the opportunities to better the breed as a whole by collecting this data. I highly recommend our NSIP flocks participate in this program to continue moving Katadhins forward.

The EAPK board and committees have been very busy this winter writing fantastic articles and planning events for this year. Another reminder that **our Annual Symposium and Sale is on July 9th in Blountville, Tennessee**. We opted for a one-day event this year, to give you a program packed with info and a lively online hybrid sale without taking too much time away from your farms. If Tennessee is too far out of reach, **we are also planning two educational field days this year - the first being June 11th in Roxboro, North Carolina, and another Pennsylvania field day in October to be formally announced soon**. We hope all of our membership will be able to attend at least one of these fantastic events!

Another feature we are looking forward to sharing with our membership are **the EAPK Open Discussion Forums which will take place the third Monday of each month via Zoom at 7:00 EST**. If you are an NSIP member, you may be familiar with this format of online open dialogue with fellow producers. It has been helpful to share thoughts, experiences, and tips with people who have a diverse set of experiences. I hope you all can join us for this casual and fun way to learn more about keeping a flock of sheep.

To a fruitful spring,
Thank you,
Brad Carothers



New on the EAPK Website

- [Selling Lamb Retail Cuts Off-Farm - Haley Zynda, Ohio State University, Wayne County Extension](#)
- [Udder Health – Isabel Richards](#)
- [Lamb Grafting Tips – Vince Pope](#)



New Feature:

Shepherd to Shepherd – Producer Forum

Sharing experiences is the hallmark of education. In this new Producer Forum, four experienced EAPK members enrolled in NSIP, from very diverse areas of the U.S., have agreed to answer questions and share their knowledge and insights into shepherding. They will describe their operations, unique challenges and what traits and qualities best fit their goals, management system and environment. The interviews will continue throughout the year with additional questions. In 2023, a new series will begin allowing four different producers to share their experiences. You can find the first Producer Forum on the [EAPK blog](#).

EAPK Members in the News

EAPK member **Tom Perkins**, pictured here with Greg Judy, recently represented our organization at the Appalachian Grazing Conference on March 11-12 in Morgantown, WV with an informational table.



Producer Profile: Vince Pope

As a dairy nutritionist by training, Vince Pope knows well the science of raising sheep. However, he feels there is a lot of art in raising sheep as well. This art is just as important as science in producing strong animals, yet often takes many years to master. Vince wanted to train border collies for competition, so Katahdins were an easy choice for flocking well and being easy care. Today they raise 60 Katahdin ewes and 20 cows. Lambing starts the first of May each spring. Read more about Double Ewe Farm in his [Producer Profile blog](#).



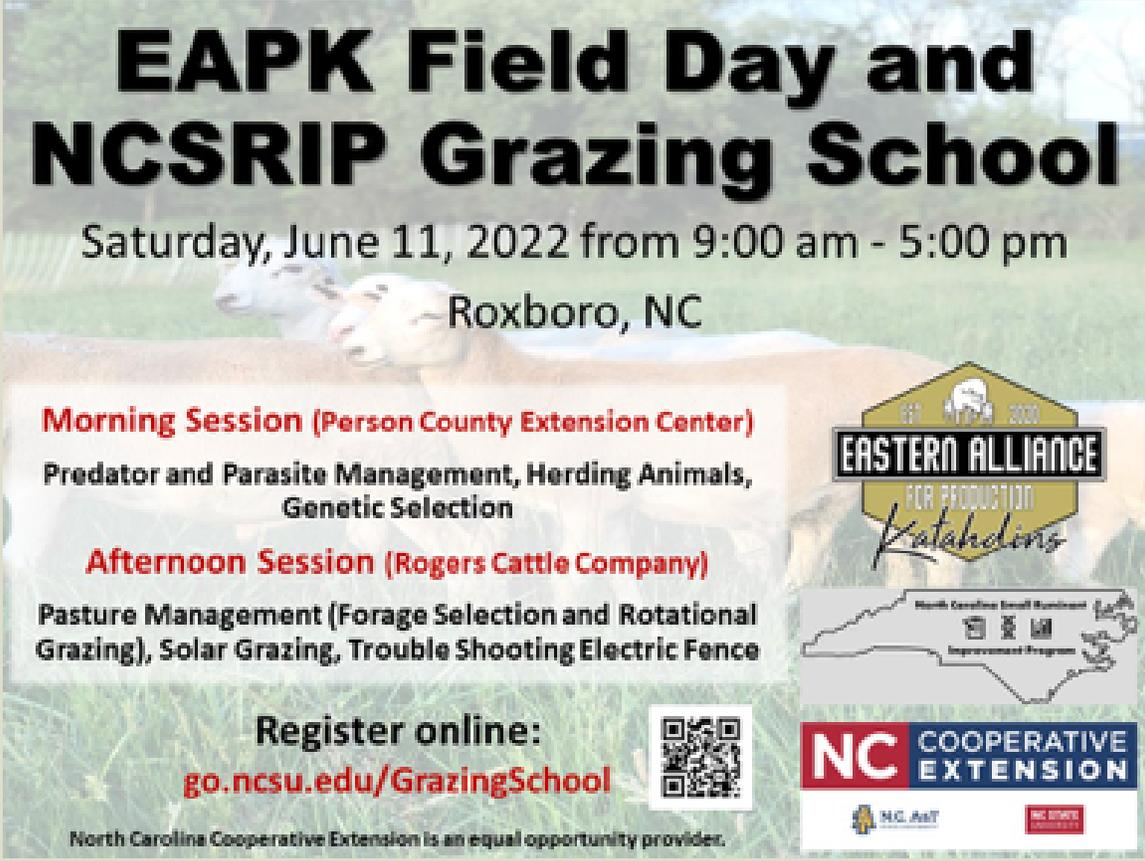
Timely Tip: Signs of Illness



Probably everyone has heard the saying “sheep are just waiting to die.” This may lead you to believe they are delicate or lack hardiness. **In fact, sheep are more than capable of withstanding adverse conditions, they’re just incredibly stoic.** As a prey animal, sheep have evolved by concealing obvious signs of illness or weakness to protect themselves and the rest of the flock from predators.

In sheep, signs of illness are often subtle until the condition is fairly advanced. Some of these signs include: isolating from the rest of the flock; drooping head or ears; not chewing their cud; limping. One very effective early intervention tool is to spend some time observing your sheep daily. Take note of small changes in behavior as these are often the precursors to serious illness.

Upcoming Events



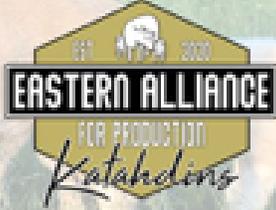
**EAPK Field Day and
NCSRIP Grazing School**

Saturday, June 11, 2022 from 9:00 am - 5:00 pm
Roxboro, NC

Morning Session (Person County Extension Center)
Predator and Parasite Management, Herding Animals,
Genetic Selection

Afternoon Session (Rogers Cattle Company)
Pasture Management (Forage Selection and Rotational
Grazing), Solar Grazing, Trouble Shooting Electric Fence

Register online:
go.ncsu.edu/GrazingSchool



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**2022 EAPK
Symposium
and Sale**
Blountville, TN
July 9th

Recruiting Flocks for 'Easy Care' GEMS Project

Jim Morgan, Katahdin GEMS Project Advisory Committee

Just think if a buyer could select genetics that would decrease management time and increase profit. A new USDA grant to Dr. Ron Lewis and collaborators proposes to develop new EBVs to do just that if we provide the data. These proposed Genomic Enhanced Breeding Values can put real teeth behind what it means to be an “easy-care Katahdin”. The data collected from participating NSIP flocks will provide the information to identify genetics for longevity; decrease dystocia and lambing issues; select for udder and teat structure that decrease mastitis and increase weaning weights and reduce the time spent bottle feeding; and select for ewes that maintain ideal body condition in your management system and environment.

It is not possible to wave a wand and produce accurate new EBVs. Geneticists need the data to document how much a trait varies in the population and how much of the phenotype is passed on to offspring (heritable portion). Although it's impossible to predict which new GEBVs Katahdin breeders will receive from this study, if enough Katahdin NSIP flocks participate in collecting the data, we may have new EBVs or a composite trait EBV that can be used to increase both ewe longevity and productivity while decreasing a shepherd's management time.

We are currently recruiting more flocks to participate in a 3-year data collection project. The Katahdin GEMS (GEMS- Genetics Environment Management Society) recruiting committee has commitments from several flocks, but more are needed. The KHSI NSIP committee has funds allocated to reimburse a portion of the genotyping expenses and the time in collecting and submitting the extra data. (More on that will come from KHSI in the future.)

So, if you're a Katahdin NSIP member, join us by collecting the data needed to improve our “Easy-Care” breed. Katahdins will no longer be defined as the easy-care sheep that doesn't require shearing. They can become an industry standard for “Easy-Care.” Katahdin breeders will have the genetic tools to decrease lamb loss due to mastitis and dystocia and to identify ewes that decrease management time.

More information on data collection and participation and the submission spreadsheets can be obtained from committee members Michelle Canfield (360-770-0615, michelle@canfieldfarms.com), Tom Hodgman(202-852-0764, hodgmans@msn.com), Jim Morgan (479-236-9569, jlmm@earthlink.net) and John Bare (515+509-3602, barejohn@hotmail.com) . The Excel submission sheets have been posted to katnsip.groups.io list serve and will be posted to the NSIP and EAPK websites.

Timely Topic: Orphan Lamb Grafting

Vince Pope, EAPK Member

Grafting lambs is a practice that takes a little extra effort to begin with but can reduce costs and labor in the long run. There are several reasons to graft lambs. Ewes may have too many lambs, or there may be one lamb who is much smaller than its siblings to compete well. Mismothering events may create situations where lambs need to be grafted to their natural mother or to a foster ewe. Unfortunately, there are times when ewes become ill or die leaving orphan lambs to manage.

Grafting works best with newborns who are less than 24 hours old but can be successful at 2-3 days of age with a little patience. Two common methods of grafting are Slime Grafting and Head Gate Grafting.



Slime Grafting works by smearing the lamb to be fostered (the “alien” lamb) with the birth fluids of the candidate foster ewe when she lambs. It works best if the alien lamb is less than 72 hours old. An older or active newborn lamb may need to be hobbled so it doesn’t behave differently than the foster ewe’s newborns. If the candidate foster ewe lambed more than an hour before the alien lamb was born, the slime graft probably won’t work. Commit 100% to the graft because the natural mother likely won’t take the lamb back once covered with birthing fluids from another ewe.

If you plan to graft lambs, always prepare a grafting pen before lambing starts so the process can begin quickly when needed. Grafting pens consist of an adjustable locking type head-gate with solid panels on either side so the ewe cannot easily see or smell the lambs. The pen should be large enough (roughly 5 x 8’) so the headgate can be unlocked, and the ewe released within the pen once daily, to test her acceptance of the lambs.

Good foster candidates are mature ewes with a single live lamb born in the last couple of days; or ewe lambs that lost a single-birth lamb that same day. When possible, choose which lamb will be grafted in advance (active, vigorous lambs work best) but be flexible because it is best to have similar sized lambs in the grafted family.

The size of the foster lamb is not always as important as is the personality of the lamb. A tiny, but tough lamb will stay in the fight. For a more detailed explanation of the process, [click here for the full article](#).

Small Flock Management

By: Allison Rudd, EAPK Member

The versatility of sheep offers a gateway into sustainable land management and food production, a low input meat source and an overall easy-care animal for a variety of individuals. As the number of small-flock EAPK members increases, the appeal for a befitting column has cropped up. Whether you are a new shepherd, small holder, homesteader, CSA farmer, or hobby farmer, there are some unique features to how small producers operate.

As small producers, we typically fabricate almost every component of our sheep operation. This allows us to keep costs low and suit everything to our needs as small holders. One of the questions that we often hear surrounding lambing is how we set up our jugs and lambing area. We lamb in March or April and our climate is unpredictable, usually offering a snow storm or extreme conditions during lambing season.



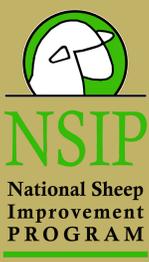
Originally, we needed something that was cheap, temporary, and could be tucked away easily for the rest of the year. We considered pallets but they were bulky and heavy. We decided to use goat panels but any wire panel will work. They were cut with an angle grinder to construct 5' x 5' boxes (jugs) within a larger pen attached to the garage-style door leading to an adjacent paddock. It's important to grind the sharp cut edges down until they are blunt and smooth to prevent injury. We used corkscrew style panel hinges to keep it all together. Buckets, hay bags, and supply baskets are easily clipped or hung from this style of jug which keeps everything accessible and convenient.

When lambing is complete, we can remove jug walls to create a small area for bottle lambs (hopefully not!) or remove them entirely to increase the pen size for ewes and lambs until it's time to return to pasture. When the sheep are on grass again, we disassemble everything and tuck it against the wall. The panels are easily repurposed for a hospital area, handling pen, or transport crate. If wood panels or pallets are what you have to work with, try using four eye bolts and a sturdy rod to construct jugs or attach panels to barn walls. An eye bolt on each panel on top and bottom should work well. This solid but temporary method of construction allows for versatility and movement of your system. I picked this trick up from another small producer. Genius!



A temporary set up has always been a priority as our lambing area is my husband's building (he told me to put that in here). We use Zeolite mineral-based granules (PDZ Refresh) to absorb urine and barn odor from the concrete floor. Spread generously and left to work, there is no remaining "sheep" odor the rest of the year. We also use this granular refresher to eliminate ammonia in between bedding changes during lambing. Zeolite is pricier than barn lime, but does not affect hooves, eyes, or respiratory tracts.

When you have a small flock, you have to adjust industry norms to suit your space and the size of your operation. Creativity and a little skill go a long way when adapting your farm for small flock production. Remain clever in your operation design and share alternate ideas with other small farmers to maximize your potential as a small flock producer.



Update on NSIP Genomics Initiative

Rusty Burgett, NSIP Executive Director

The batch submission dates for genomic evaluation through NSIP have been set for 2022. The dates will be: **April 15, June 15, August 15, October 15, December 15.**

These dates have been added to the [data run calendar on the NSIP website](#) for your reference.

To date, there have been over 3,000 animals genotyped in addition to the initial research reference population! Although there were a few hiccups in 2021 impacting the turnaround time for results, samples continue to come in for processing and provide additional data to the genetic evaluation through G-EBVs. Over the past several weeks, we have had numerous meetings with Neogen and LambPlan to improve the turnaround time for results and appreciate your patience as we progress. Several hurdles have been overcome so **we are currently looking at a 6-8 week turnaround time for results.** Those conversations will continue in 2022 to try to speed up the process and we will keep you all up to date as we move forward!

Thank you to everyone for being a part of NSIP and “the genetic foundation for a profitable sheep industry”. **Membership continues to grow and Katahdins are the largest breed in the program in number of producers. This means the potential for genetic progress is huge and is a testament to the breed’s willingness to be industry leaders!** Thank you to all for being on the cutting edge of the industry! If you ever need anything, please don’t hesitate to contact Rusty Burgett, NSIP Executive Director at info@nsip.org.



Happenings from the KHSI Board of Directors

From Dan Turner, KHSI Board Member



The KHSI BOD continues to meet every month and is working on several initiatives. First, we are pleased to announce that the overall outlook for Katahdins is positive. Membership, registrations and transfers hit record highs in 2021. We will continue to develop new programs and valuable resources for our members including expanding funding for more Katahdin show classes, support producer functions and research and increasing benefits to membership. One big benefit is the Expo which will be held August 4-6 in Cookeville, TN. Here are a few things we've been working on:

- The KHSI website will be getting a facelift, our goal is to make the site more organized and efficient.
- KHSI will award up to 5 youth college scholarships for a minimum of \$1,000 each. Some BOD members wanted 2 scholarships for \$2,500. This can be adjusted year by year, so if you have comments on this, we are listening.
- The current KHSI table-top promotional display will be updated. Displays are available to KHSI producers and clubs that are having promotional, Katahdin events.
- The youth show fund received an award of \$100 for the KHSI display at NAILE. This money has been put into the youth show fund, now chaired by Becky Shultz.
- No sheep that are QQ at Codon 171 can be consigned to the Midwest Stud Ram Sale. This new qualification requirement is in line with KHSI Expo sale rules.
- Although a KHSI delegate did not attend the 3rd Katahdin Congress in Mexico, we did provide \$500 toward trophies for their show event.



Timely Topic: Tagging Considerations

Tags serve many purposes, but the primary one is animal identification. The ID tag of registered and recorded Katahdins must match the certificate of registration or recordation exactly and in accordance with KHSI's new Flock ID policy. [Click here to learn more about KHSI's new flock ID policy.](#)



KHSI allows flexibility so members can use their preferred ID system and tag style. Tags can be ordered from several sheep and/or animal health supply companies. The tags can be preprinted or blank. Replacement and/or initial tags may be handwritten on a blank tag with a designated tag marking pen. Check handwritten tags regularly to be sure they remain legible. There are several logical numbering systems in use. KHSI has no preference other than once an ID number has been used it cannot be duplicated or reused on another animal. Probably the most common numbering systems include the year of birth in the ID (2201, 2202, etc.). Larger flocks with over 100 lambs could use five digits (22001, 22002, etc.). A running numerical sequence is sometimes used where the first animal born on the farm would be "0001" with each year starting where the previous year left off. Some flocks have chosen to use an alpha character to denote the year (E001, E002, etc. or 001E, 002E, etc.). The important thing is to be consistent. Both the USA and Canada require that sheep leaving their original premise MUST have a Scrapie ID tag. Scrapie tags require a state "premise ID" which is provided by the state's APHIS office. The tags must be preprinted with a unique number. If it gets pulled out, it can be replaced with any scrapie tag, just make a note of the new number. Scrapie ID numbers do not have to match the animal's flock ID, but you do need to keep track of the two IDs for each animal in case there's a disease outbreak involving an animal that originated from your farm.

It's best to tag lambs before they leave the lambing jug. This helps ensure accurate identification of animals, and is also the cleanest the lamb's ears will ever be. It does weigh them down a bit for the first few weeks, so the ears look a little droopy.

Ear tags can be used for more than just animal ID numbers. Strategic use of tag color or placement (right or left ear) can indicate sex, year of birth, sire, problems (cull) and/or single/twin/triplet.

Timely Tips

How Long to Jug

How long ewes and lambs stay in jugs can vary. Some producers go by age – 1 day for singles; 2 days for twins; 3 days for triplets. Some look at activity level – when the lambs are active and start to “bounce.” Using weights provides a more accurate assessment. Weigh dry lambs with a digital scale when they are put in the jug. Weigh again in 24 hours. If they've gained a few ounces, tag the lambs and release from the jug. If all of the lambs have not gained weight, keep them jugged. Assess whether the non-gaining lamb can suckle and if the ewe is pushing it away. If the lamb suckles well, check to make sure the ewe has a good stream of milk and that the milk and udder appear normal and show no signs of mastitis. If all is fine and the lamb does not have an empty belly, recheck the next day. Often by then the lamb has gained weight. This helps to free up jugs quickly during peak lambing.



Mastitis

Most cases of mastitis are caused by common bacteria found in the environment or from the normal bacteria on the skin or in the mouths of sheep and lambs. Ewes confined in wet, dirty or crowded areas have a higher risk for exposure to these pathogens. To reduce environmental contamination, keep pens, bedding and areas around the barn clean and dry. Lambs with pneumonia can transmit the bacteria to the ewe's udder while nursing. If a ewe has mastitis, separate her and her lambs from other ewes. When her lambs get hungry, they will steal milk from other ewes and spread the infection. When you see lambs stealing, check their dam for mastitis.



Starting Lambs on the Bottle

To introduce lambs to a bottle, hold them close against your body with your arm and use your hand to position their head. Older, more experienced lambs will take a bottle standing on their own. Baby lambs less than 24 hours old are much easier to start than older lambs. Once lambs are started, consider bucket feeding to reduce labor, especially for multiple bottle lambs.



Quantifying Inputs

Dr. Andrew Weaver, NCSU Extension Small Ruminant Specialist

With lambing season underway for many and the growing season just around the corner, many have realized that input costs in 2022 are going to be higher than they've been for a while (or maybe ever). Feed, seed, and fertilizer costs have all increased in the last year and continue to trend upwards. The cost of production is increasing. To remain profitable, revenue needs to increase or we need to find a way to decrease our inputs and expenses. Fortunately, lamb prices are at all-time highs so revenue potential for 2022 is encouraging. Even so, careful consideration should be given to the expense side of the profitability equation. How do we control or lessen our inputs? Feed accounts for over 50% of production costs. Identifying animals that maintain a level of production with fewer inputs could have a significant impact to our bottom line. Feed efficiency can be measured in many ways and there's some debate as to the best metric.

Common metrics used to describe efficiency include feed intake, feed to gain ratio, and residual feed intake (RFI). Feed intake only accounts for one side of the equation and doesn't allow us to consider differences in performance (maybe they ate less because they barely grew). Feed to gain ratio indirectly selects for growth and mature size resulting in larger framed ewes with higher maintenance requirements. Residual feed intake is independent of average daily gain (ADG) and is the difference between actual and expected intake by the animal (Did the animal eat less than expected given its level of performance?).

In a Katahdin feeding trial at West Virginia University, feed efficiency metrics were compared between sire groups (Group A and B). Lambs in both sire groups gained 0.37 lb./day. Group A maintained this level of gain on 3.63 lb. feed/day. Group B required 4.07 lb. feed/day to maintain this level of performance. Residual feed intake favored group A by 0.48 lb. If you were feeding a group of 100 lambs, that's a savings of almost 50 lb. (equivalent to a bag of feed) per day with the same level of production (ADG).

Based on research in cattle, the heritability for RFI is 30-52% (Rolfe et al., 2011; Diaz et al., 2013). This moderate heritability indicates the opportunity for selection. The challenge is measurement. Quantifying RFI requires daily monitoring of feed intake. For most of you, the cost of this feed intake monitoring equipment far exceeds your enterprise budget. This difficult to measure trait will likely need to be quantified through collaborations with academic institutions. Fortunately, new systems will be in place this summer at research stations in Virginia and North Carolina. The flocks maintained at these research stations will be used to begin quantifying variation in feed efficiency within the Katahdin breed. This won't happen overnight, but hopefully in the coming years these efficiency traits can be better understood and selection practices can be implemented to decrease production inputs.





Mark your Calendars

EAPK/NC State Field Day – Saturday, June 11, 2022 – Field Day & NCSRIP Grazing School

EAPK Symposium and Sale – Saturday, July 9, 2022 – Blountville, TN

Open Discussion Forums – 3rd Monday of each month at 7:00 PM EST via Zoom

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